

Keeping up the Challenge: Tools to Create and Fund Your Green Projects & Inspire Community Action

AGENDA

- Mike Eichhorn, USGBC Green Schools Committee, FGM Architects
- Lyndl Schuster, River Trails School D26
- Meta Dunn, District 26 Community Member & Parent
- Josh Hatch, Euclid Elementary 3rd Grade Teacher
 - River Trails D26 Green School Committee – A Story of Success
- Rose Jordan, Midwest Energy Efficiency Alliance
 - Green to the Core – How to Leverage IL State Funding
- Cynthia Nielsen-Morgan , Shift2Green
 - Shift To Green – Shifting Behaviors with Green Fundraising
- Questions and Answers

River Trails SD26 Goes Green

Euclid School
and
Indian Grove School

Illinois Green Ribbon
Schools

1st and 2nd in State 2013



U.S. DEPARTMENT OF EDUCATION



3 Pillars:

Environmental
Impact and
Energy
Efficiency

Healthy
Environments

Environmental
Literacy

www2.ed.gov/programs/green-ribbon-schools

Pillar One

Environmental Impact and Energy Conservation

Starts with basic data gathering:

- University of Illinois SEDAC Facility Audit
 - DCEO Energy Grants
- LEED for Schools – Architect Checklist
- EPA – Energy Star School
- LEED EB – Existing Buildings
- School Dude

Follow and Record your own Process
Flexibility

ENERGY SAVING TOOLKIT

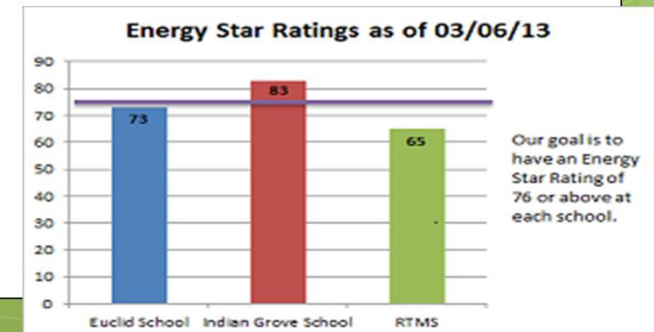
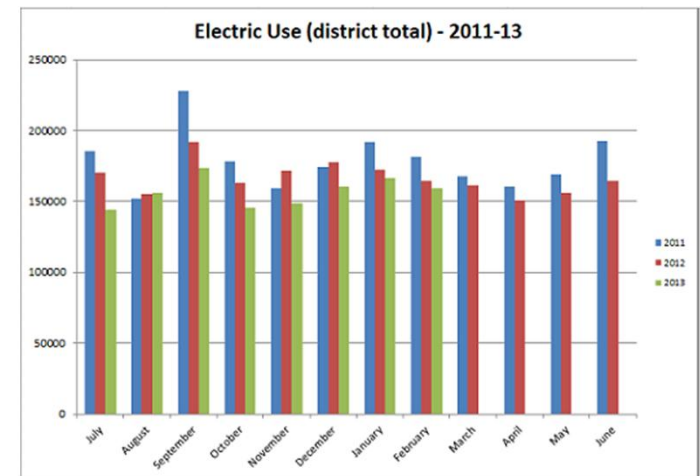
ENERGY SAVINGS IDEAS AND OPPORTUNITIES FOR YOUR SCHOOL DISTRICT

	FIRST LEVEL	SECOND LEVEL	THIRD LEVEL
SEDAC AUDIT	<input type="checkbox"/> Free Building Energy Assessment	<input type="checkbox"/> DCEO Department of Commerce & Economic Opportunity Grants and rebates for electrical and natural gas efficiency improvements and renewable energy implementation	<input type="checkbox"/> IGIG Illinois Green Infrastructure Grants Grants for controlling stormwater runoff for water quality protection in Illinois
MAINTENANCE	LIGHTING <input type="checkbox"/> Replace exterior & interior light sources with LED, fluorescent & CFL bulbs <input type="checkbox"/> Install occupancy sensors ELECTRICAL <input type="checkbox"/> Install powerstrips and Vending Misers WATER <input type="checkbox"/> Install low-flow plumbing fixtures <input type="checkbox"/> Reduce outdoor irrigation HVAC <input type="checkbox"/> Install programmable thermostats, insulation & caulking	Retro Commissioning <input type="checkbox"/> Improve the efficiency of operating systems with a focus on building controls and HVAC systems	<input type="checkbox"/> LEED Green Globe Registration of School <input type="checkbox"/> Green Ribbon Application <input type="checkbox"/> Addition of Photovoltaic & Wind Energy <input type="checkbox"/> New Roofing with Reflective Coating <input type="checkbox"/> HVAC Replacement
BEHAVIORAL CHANGES	<input type="checkbox"/> DEVELOP RECYCLING PROGRAM Reduce garbage hauling costs and reduce impact on landfills <input type="checkbox"/> DEVELOP EDUCATION PROGRAM Reduce daily lighting, water and electrical usage <input type="checkbox"/> CHANGE PRINTER DEFAULTS Set to double sided to reduce paper usage <input type="checkbox"/> UTILIZE WINDOW SHADES Reduce solar heat gain	Appliance Replacement <input type="checkbox"/> Replace appliances with Energy Star products Alternative Stormwater Collection <input type="checkbox"/> Install rain gardens, rain barrels, bio-swales, etc. Planting of Shade Trees <input type="checkbox"/> Plant shade trees on the south and west of building exposures to reduce heat gain	

Pillar One

Environmental Impact and Energy Conservation

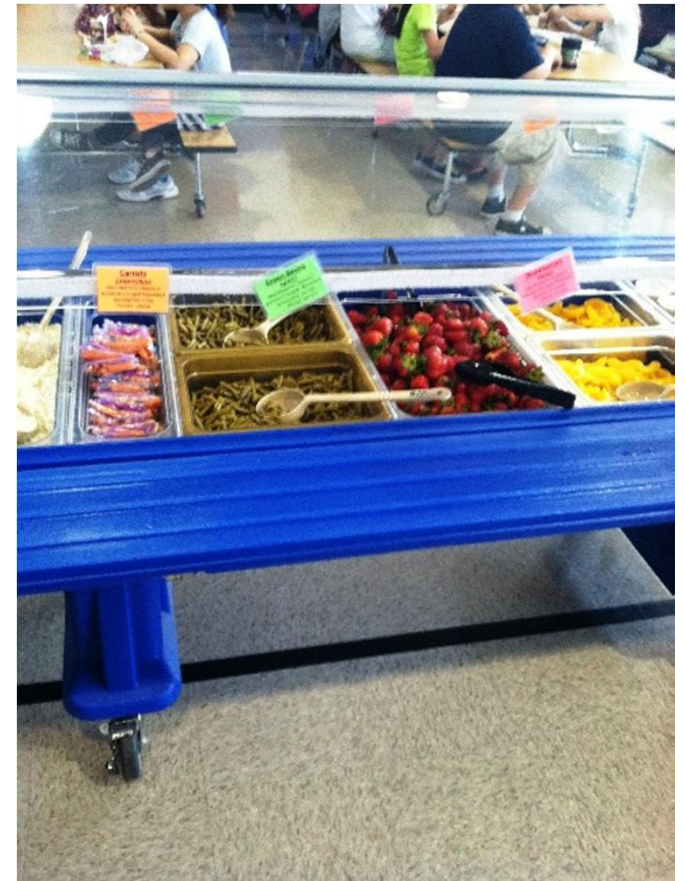
- Lighting retrofit and occupancy sensors
- Limit electrical appliances, timers on computers
- HVAC computer controlled
- White SEBS roofing – high reflectivity
- Reduced paper and printing consumption
- Water conservation – no irrigation, renovated washrooms
- Recycling
- Walking and biking
- Green cleaning products
- Bio-diesel buses



Pillar 2

Healthy Environments

- Green Cleaning Products
- Windows in every classroom – Natural light and ventilation
- Fresh fruit and vegetable salad bar
- USDA Healthier US School Challenge Awards
- PE Daily and Outdoors whenever possible
- 'Wellness Policy and Committee'



Healthy Environments

VOC's (Volatile organic compounds) Indoors are emitted as gases from a variety of building materials

Natural Light and Ventilation



Green Cleaning

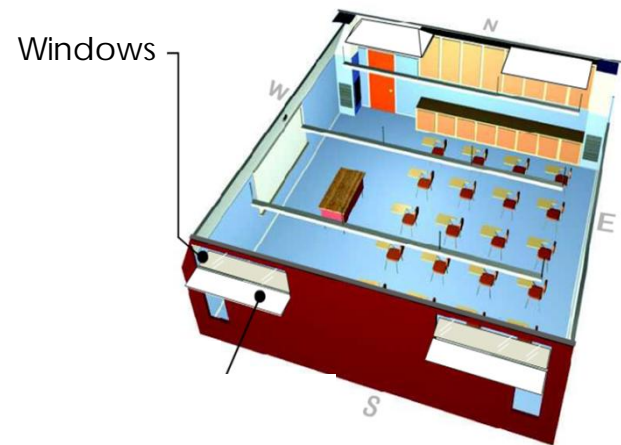
- Mandatory in Illinois
- Reduce contaminants in building with little environmental impact



'Green Classroom Professional Certificate Program'

For teachers to foster best practices in own classroom

Certificate Class at Fall Symposium & online



Pillar 3

Environmental Literacy

- Teaches recycling and sustainability practices



Innovation & Design



Stewardship

School as a Teaching Tool

- LEED credit for developing a curriculum based on the building as a 'teaching tool', specifically "the relationship between human ecology, natural ecology, and the building".
- Have a way to track the building energy/water usage



Community Involvement

- Illinois Green Apple Day of Service



It Takes a Village

El Jardin De Los Suenos The Garden of Dreams

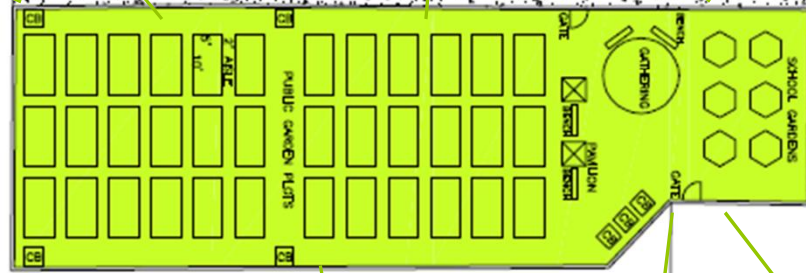


FGM ARCHITECTS



GARDEN PLAN

(6) 68" COMPOST BINS
(24) 5' FT X 10' FT PLOT RENTALS
(6) 3' FT SIZED HEXAGONAL PLOTS



Community Involvement

- Green Challenge Project
 - Building the Garden
 - Purple Asparagus 1st Grade Nutrition Classes
 - Community Classes
 - Cooking
 - Gardening



Green Schools Community Committee Established:

- District Administration
- School Board
- Park District
- Village of Mt Prospect
- Mt Prospect Chamber of Commerce
- Legislature
- Parents
- Teachers
- Other Community –
Library, Architect,
Energy Companies,
Custodial Supply
Company



Green Schools Community Committee

Mission

River Trails Green Schools will lead the way in promoting environmental sustainability within our community and schools by inspiring our students and staff to protect the environment and be responsible global citizens.

Vision

- Empower students and the community to understand their natural world and their impact on it.
- Provide opportunities for students to make connections between the science they learn and the science they experience in their natural environment.
- Create opportunities for the community and school to understand how people, energy, and the environment are dynamically interrelated.
- Promote the health and well-being of students, staff, and community.
- Instill a sense of respect and ownership of one's environment that fosters advocacy and activism.

Green Schools Community Committee

- Subcommittees
 - Education
 - Garden
 - Student Involvement/Civic Engagement
 - Public Relations/Collaboration





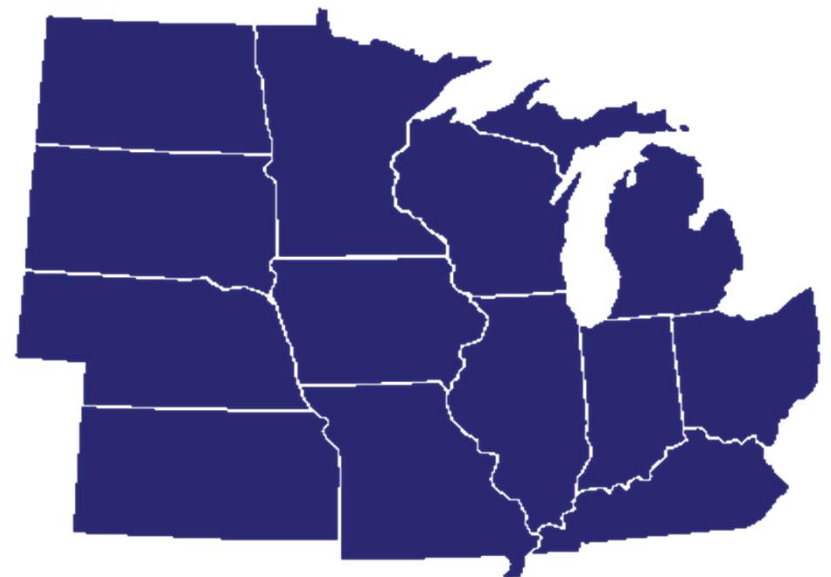
Green to the Core

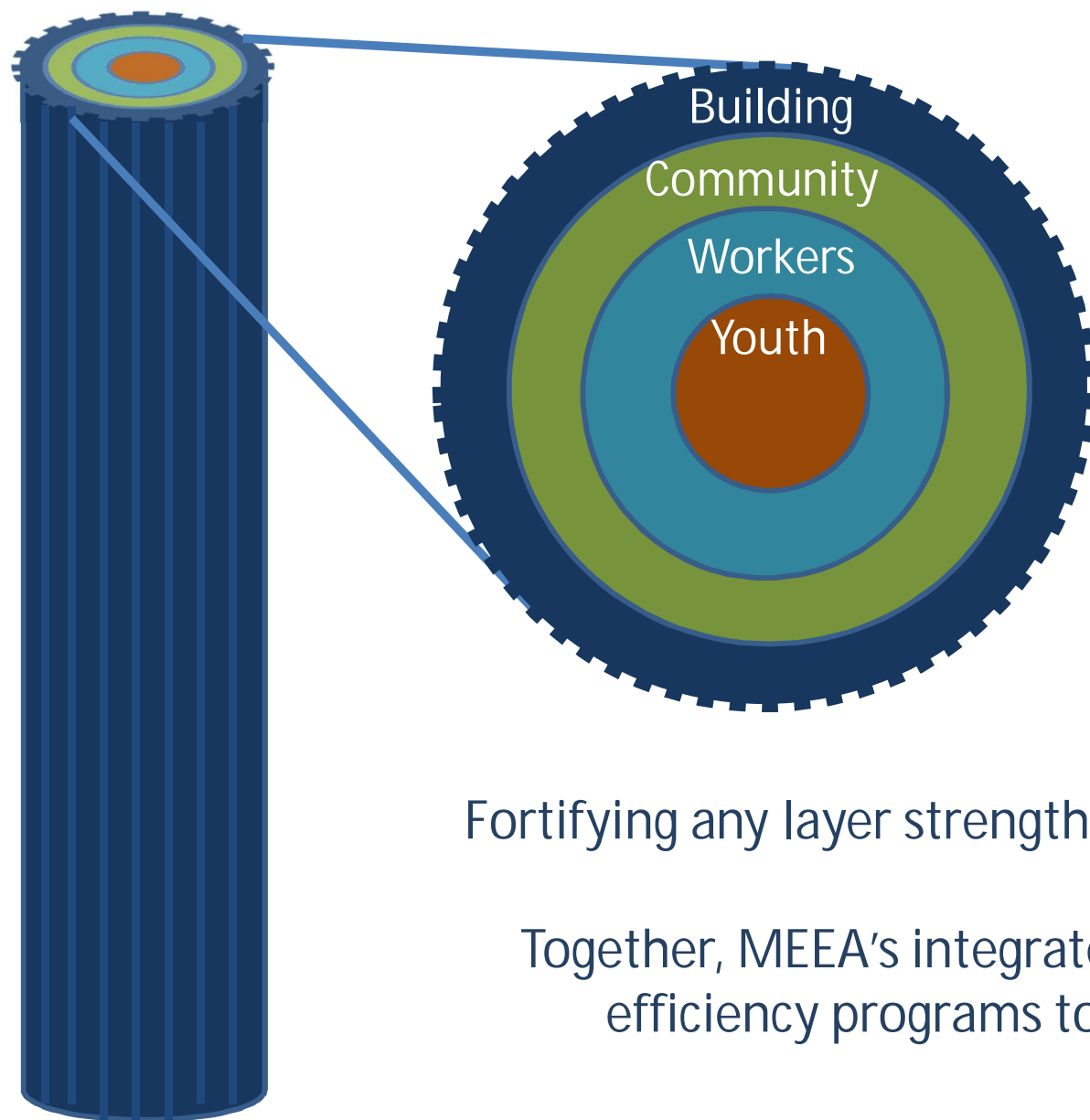
How to Leverage State Funds to
Fortify Pillars I and III



Midwest Energy Efficiency Alliance

MEEA is a nonprofit organization bridging the gap between energy efficiency policy development & program implementation





LIGHTS FOR
LEARNING®



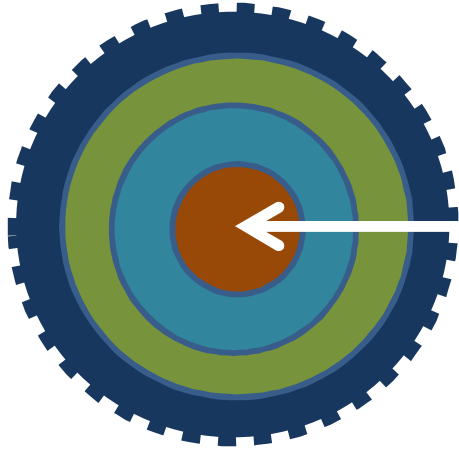
STEP

Savings Through Efficient Products
Partnering with Public Facilities to Reduce Energy Use



Fortifying any layer strengthens the whole pillar

Together, MEEA's integrated suite of school
efficiency programs touch all layers

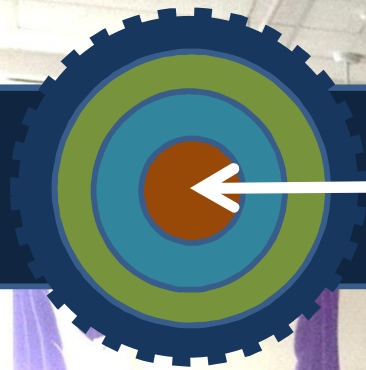


PRESENTATIONS

Lights for Learning®

The difference between school and life? In school, you're taught a lesson and then given a test. In life, you're given a test that teaches you a lesson.

Tom Bodett

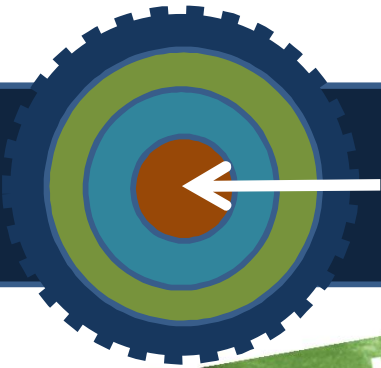


Lights for Learning® Presentations

KEY QUESTIONS ADDRESSED

1. Where does our energy come from?
2. How much does it cost?
3. Where is it wasted?
4. How can we use energy efficiently?
5. How do we choose and use efficient products?
6. What is renewable energy?

Lights for Learning® Presentations



Home Energy Efficiency Investigation
The search is on for energy-wasting items around your home!

Lights for Learning®
A MEEA program funded by IL DCEO

1. How many light bulbs are in your house or apartment? (Don't forget the garage, closets, basement, attic, etc. Also, some light fixtures have more than one bulb...be sure to count each bulb individually!) _____

2. How many of the lights bulbs are energy-wasting incandescent bulbs? _____

3. How many are energy saving compact fluorescent bulbs (CFLs) or LED bulbs? _____
Tip: Each incandescent bulb you replace with a CFL can save your family \$35.00 or more in energy costs and the savings are even greater when you use a LED!

4. Count the total number of appliances in your house. (Include the refrigerator(s), dishwasher, microwave, washer/dryer, air conditioners, dehumidifier, televisions, water heater, etc.) _____

5. How many have the ENERGY STAR® label? (Remember, there are several different ENERGY STAR labels.) _____
Tip: The ENERGY STAR label helps you know which appliances save more energy than regular ones!

6. Does your home have a programmable thermostat? _____

7. What are the temperature settings on the thermostat in your home? Daytime? _____ Nighttime? _____
Tip: You can save about \$180.00 per year simply by turning your thermostat down during the times of day when people are sleeping or away from home!

8. Is your ceiling/attic insulated? _____
Tip: Proper insulation can help save money throughout the year on both heating and cooling costs.

9. Is your water heater set at 120° F or lower? _____
Tip: Simply by reducing the temperature setting on your water heater to 120° you can save up to 5% yearly in energy costs and greatly reduce your risk of being burned by hot water.

10. Search for two other areas of wasted energy in your home. How would you solve the problem?
A. _____
B. _____

MEEA
Midwest Energy Efficiency Alliance
The Source On Energy Efficiency

Illinois Department of Commerce & Economic Opportunity
Pat Quinn, Governor

Suite 101, Mokena, IL 60448 | 877.693.7827 | www.lights4learning.org

5 FAST FACTS!

- Approximately 1/3 of all of the energy used in your school, library, public parks and buildings are used inefficiently.
- A school photocopier left on overnight uses enough energy to make 6,300 photocopies.
- A family of four, each showering for 5 minutes a day, uses 700 gallons of water a week; this is enough for a 3 year supply of drinking water for one person. You can cut that amount in half simply by using low-flow aerating showerheads and faucets.
- Efficiency counts. The most effective new appliances typically use 80% less energy than the most wasteful ones. Ask if your parents look for appliances with the ENERGY STAR® logo.
- Clean your light bulbs. A thick layer of dust on a light bulb can obstruct as much as half the light the bulb can actually produce.

Information taken from U.S. Energy Information Administration

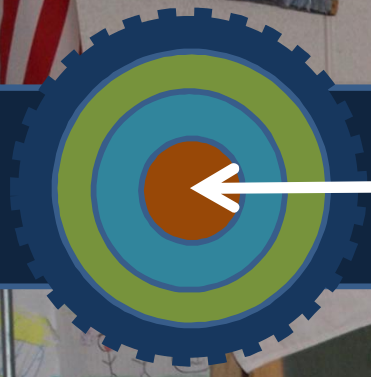
TOP TEN WAYS TO USE ENERGY WISELY

- Turn off lights. ☐
- Use energy-saving light bulbs. ☐
- Shut off computers. ☐
- Use "smart" power strips. ☐
- Turn off TV and video games when not in use. ☐
- Use natural light, heat & cooling. ☐
- Unplug your phone charger when not in use. ☐
- Turn off the water while brushing your teeth. ☐
- Always run dishwasher with a full load. ☐
- Be sure refrigerator is tightly closed. ☐

WORD SEARCH

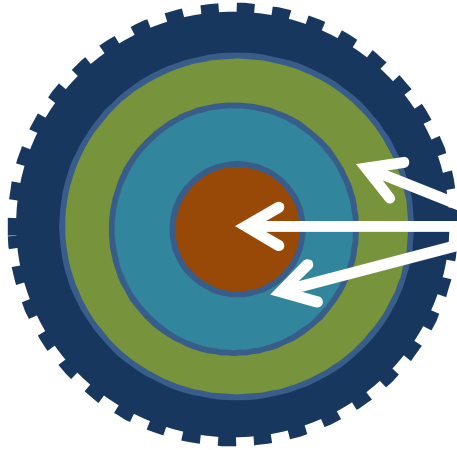
LIANES
CFL
WITH
ATE
NT
STAR

E Y H T R A E S T G R W I G E
N F B A H X P O I X E N F M M
S X F T S S I F G S C S R Q E
J E R I A N F K U T Y B L U R
S A C V C O R E L A C O Z R G
E C U K I D U P R L I G H R
R S Y U D U E C N M E F Q X A
X E A O C E D N U X W J R O T
D G U A G U R H T J L U X C S
B G T S A P P L I A N C E S Y
Z E N D E M C N D L R F N M G
K B Z L N E B X H F W L O A R
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Lights for Learning® Presentations



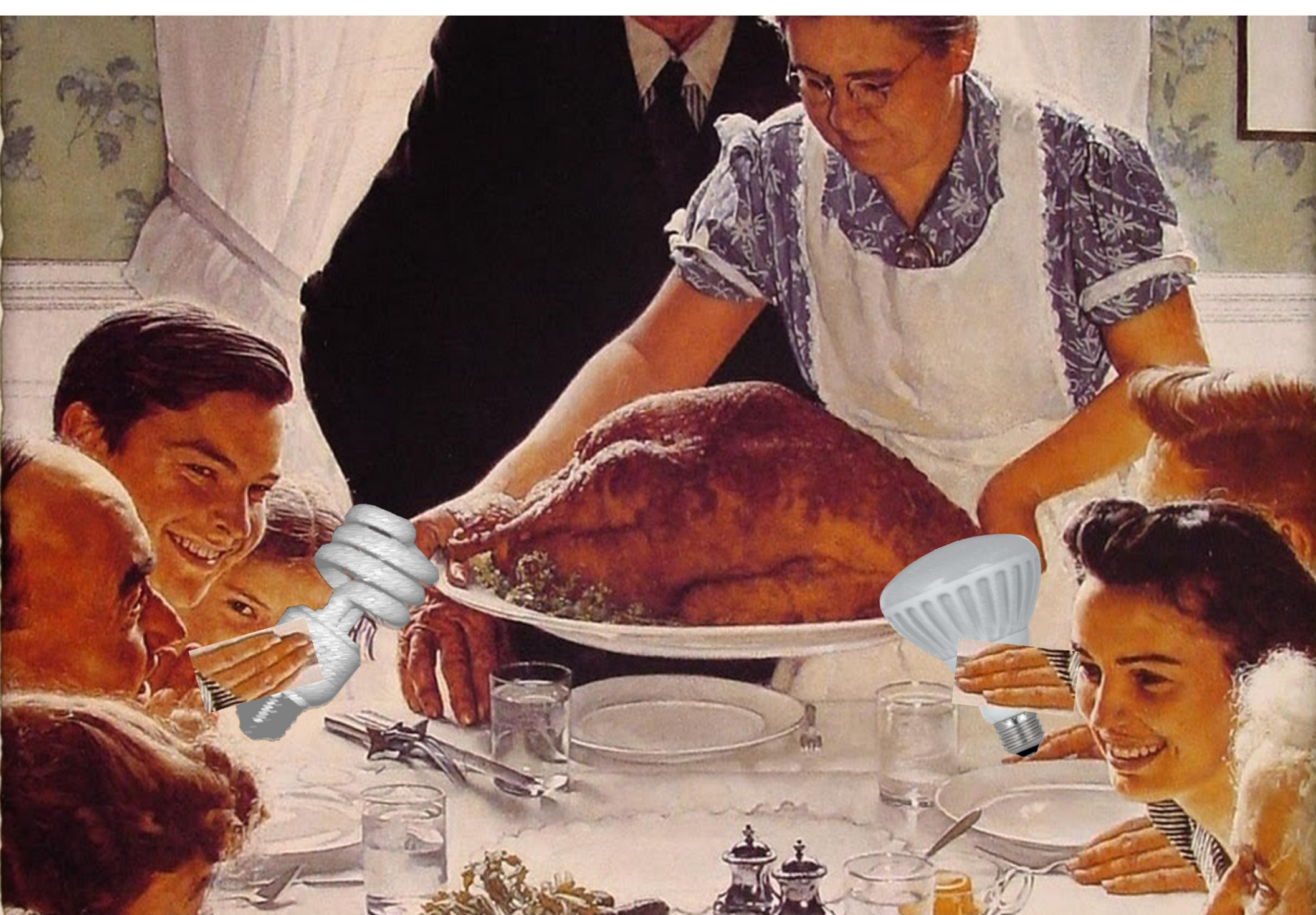


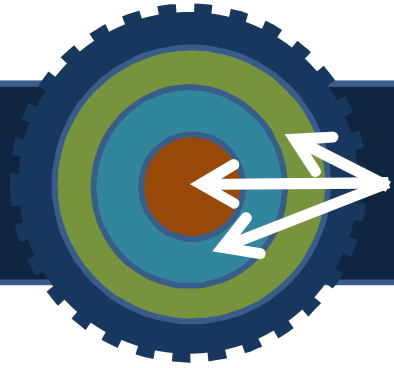
Fundraising

Lights for Learning®

"It's easy to make a buck. It's a lot tougher to make a difference."

Tom Brokaw





Lights for Learning® Fundraisers

50%

- Schools keep 50% of all profits
- Buyers pay below-market prices for high quality products
- Youth learn about efficiency

Lights for Learning® Fundraisers



Lights for Learning®
A MEEA program funded by IL DCEO

FUNDRAISER

Energy Efficiency for Students and Teachers
Make a Change with ENERGY STAR®
FUNDRAISING 101
SAVING ENERGY IN SCHOOLS
LEDs, CFLs, and Efficient Products

Saving Energy through Education and Fundraising

MEEA
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Illinois Department of Commerce & Economic Opportunity
For Quins, Governor

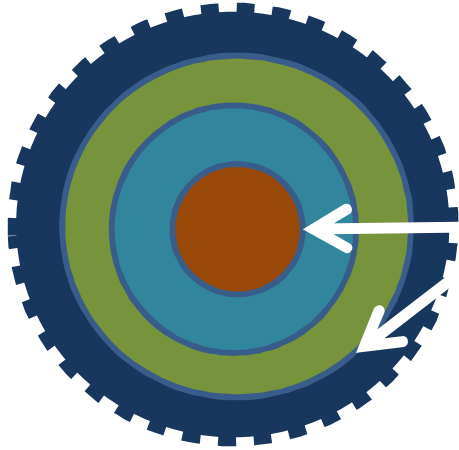
A 9 Watt LED PAR20 LUMENS 450 40 Watt alternative 25,000 hours YOUR PRICE \$9.00 Lifetime savings \$31.00	B 13 Watt LED LUMENS 800 60 Watt alternative 25,000 hours YOUR PRICE \$12.00 Lifetime savings \$29.00	C 14 Watt PAR 30 LED LUMENS 900 75 Watt alternative 25,000 hours YOUR PRICE \$20.00 Lifetime savings \$36.00	D 13 Watt R-30 LED LUMENS 630 60 Watt alternative 25,000 hours YOUR PRICE \$20.00 Lifetime savings \$37.00
E INNOVATIONS NIGHTLIGHT LUMENS 250 5 Watt nightlight alternative YOUR PRICE \$3.00 Lifetime savings \$21.00	F 7 Watt Mini CANDELABRA LUMENS 250 25 Watt alternative YOUR PRICE \$3.50 Lifetime savings \$18.00	G 14 Watt GLOBE LUMENS 800 60 Watt alternative YOUR PRICE \$5.00 Lifetime savings \$28.00	H 14 Watt R-30 REFLECTOR LUMENS 650 60 Watt alternative YOUR PRICE \$6.00 Lifetime savings \$28.00
I 14 Watt A LAMP 2 Pack LUMENS 700 60 Watt alternative YOUR PRICE \$7.00 Combined lifetime savings \$56.00	J 13 Watt CFL 4 Pack LUMENS 900 60 Watt alternative YOUR PRICE \$2.00 Combined lifetime savings \$116.00	K 20 Watt CFL 2 Pack LUMENS 1100 60 Watt alternative YOUR PRICE \$2.00 Combined lifetime savings \$116.00	L 13 Watt CFL 2 Pack LUMENS 900 60 Watt alternative YOUR PRICE \$2.00 Combined lifetime savings \$116.00
M 19 Watt SPIRAL 3 PACK LUMENS 800 75 Watt alternative YOUR PRICE \$5.50 Combined lifetime savings \$99.00	N 13,20,23 Watt SPIRAL SAMPLE PACK LUMENS 1100 75 Watt alternative YOUR PRICE \$6.00 Combined lifetime savings \$110.00	O 13 Watt CFL 2 Pack LUMENS 900 60 Watt alternative YOUR PRICE \$2.00 Combined lifetime savings \$116.00	P 13 Watt CFL 2 Pack LUMENS 900 60 Watt alternative YOUR PRICE \$2.00 Combined lifetime savings \$116.00



Lights for Learning®

LAST YEAR

- Educated 20,000+ students from 177 schools
- Fundraising youth sold 18,233 items
- Raised over \$34,000 for IL schools & related orgs
- Achieved estimated energy savings of 514,254 kWh



The Building

Savings Through Efficient Products Building Operator Certification

It is much easier to put existing resources to better use, than to develop resources where they do not exist.

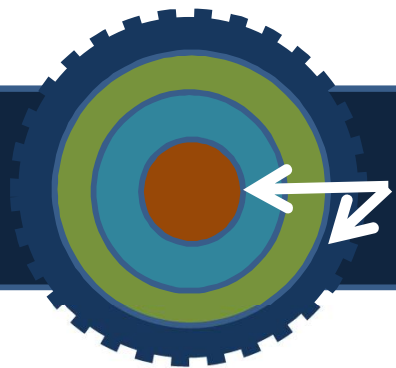
George Soros



Savings Through Efficient Products

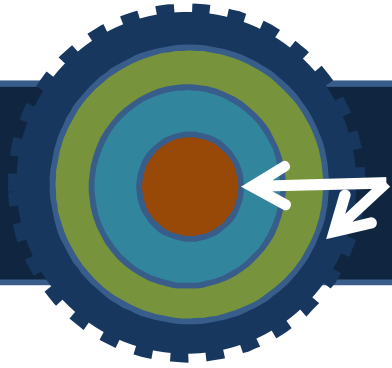
SIMPLE PROCESS

1. Schedule a free energy assessment
2. Receive free products
3. Install products within 3 months of receipt
4. Confirm installation
5. Receive comprehensive report with additional opportunities for savings



Savings Through Efficient Products





Savings Through Efficient Products



STEP

Savings Through Efficient Products
Partnering with Public Facilities to Reduce Energy Use

DCEO Standard Program
DCEO Custom Program
Building Operator Certification
Lights for Learning®
New Construction Program
Retro-commissioning
Boiler Tune-up
Green Nozzle Program
SEDAC Assessment



MEEA
Midwest Energy Efficiency Alliance

The Source On Energy Efficiency

Shift²Green

For our children, for our future



**“We do not inherit the earth from our ancestors,
we borrow it from our children.”**
~Native American Proverb

www.shift2green.us



Fundraising with Products or Services that Benefit our Health and/or the Environment with proceeds benefitting one or more parties

Powered by Inspiration and Global Citizens like You

Why the Need for Green Fundraising?



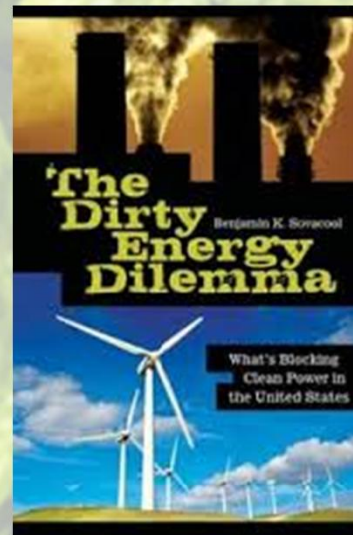
As a community and as global citizens, we have a social responsibility to develop programs and services that support our communities and the environment.

Schools, Churches, Parks, Recreation, Sports, Teen Centers



Consider the Facts

- Childhood obesity has more than tripled in the past 30 years..
- Childhood Asthma rates have increased 4 times in the past 30 years due to air pollution.
- Bottled Water produces 1.5 million tons of plastic waste and requires 47 million gallons of oil per year.
- Close to 50% of electricity used by industry is for lighting, and in homes, up to 25 percent of our electric bill is for lighting.
- Each person generates over ten tons of greenhouse gases per year just by driving our cars, washing our clothes and turning on our lights.
- More than two billion household batteries are disposed of each year and those are only the ones that are sent to landfills. If they were taken to recyclers instead, many health risks would be avoided.



Our Actions Have Consequences



The Benefits of Green Fundraising

- Raises awareness around key issues that effect our communities like Climate Change, Pollution, Harmful Chemicals, Food Safety, Clean Energy Alternatives, Social Justice, and more.
- Supports the growing interest and demand for affordable, healthier alternatives





The Next Generation

- A viable alternative to traditional fundraising
- A viable strategy for implementing behavior changes that support healthier lifestyles
- Supports local economic development
- Fosters Innovation, and can inspire and motivate people into action



Green Products

- BPA Free Water Bottles
- Reusable Bags
- Compostable Garbage Bags
- Organic Apparel
- Energy Saving Products
- Spirit Wear
- Inspiration Books & Music
- Recycled Accessories
- Fair Trade Foods & Crafts
- Chemical Free Skin Care
- Chemical Free Cleaners
- Green Apparel



Fundraising w/ Humor

POO-POURRI®

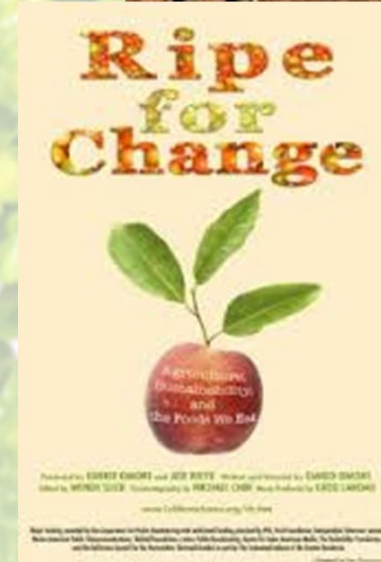
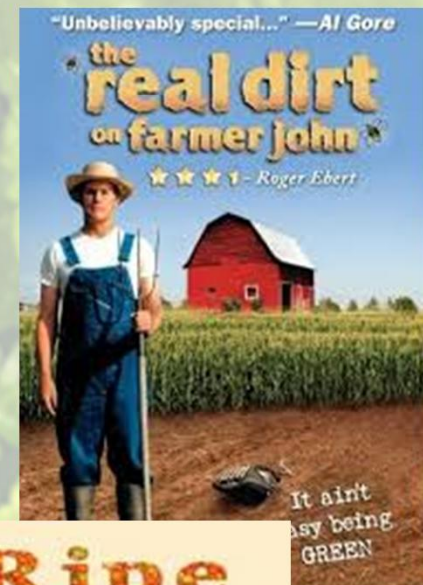
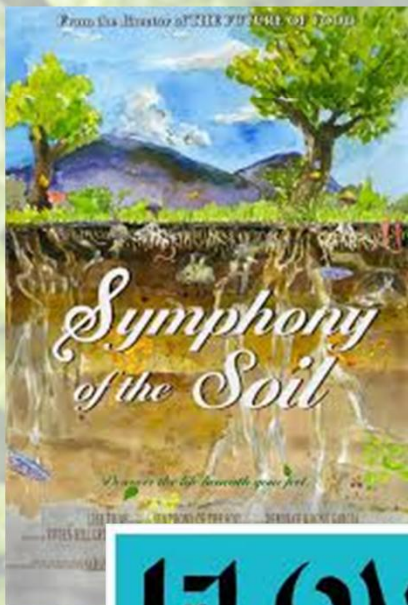
SPRITZ THE BOWL BEFORE-YOU-GO
AND NO ONE ELSE WILL EVER KNOW!



Extend Learning Opportunities

- Rain Barrels
- Compost Bins
- Recycling Bins
- Food Literacy
- Cooking
- Student Kitchens
- Solar Panels
- Wind Power
- Energy Audits
- Farm Field Trips
- Bike Racks
- Recycled Paper
- Gardens
- Native Landscaping
- Benches & Tables
- Microscopes
- Magnifying Glasses
- Seed Banks
- Support CSA





**We're All Connected & Working Together
We Can Make a Difference**



Iroquois Community School Green House Fundraiser



700+ Plants started - Sold in 2 Days!



Iroquois Farm Field Trip

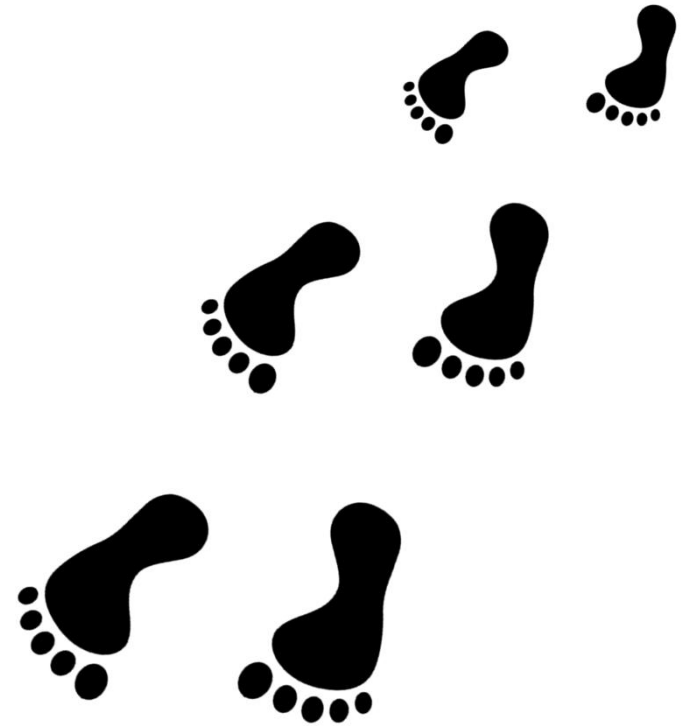


Remember...

Every time you make a purchase you're casting a vote for change.



Thank You



www.shift2green.us

Cynthia Nielsen-Morgan , CSM
Your Change Agent P. 773-800-9174
[*Shift2GreenNow@gmail.com*](mailto:Shift2GreenNow@gmail.com)



Powered by Inspiration and Global Citizens Like You

Ready to Inspire *Your* Community to Action?

Questions or Comments? Please Share Your Own Success Stories!

Name	Organization & Role	Email Address
Mike Eichhorn	FGM Architects; USGBC Green Schools Committee	michaele@fgmarchitects.com
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